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(21) International Application Number: PCT/DK95/00104 (22) International Filing Date: 7 March 1995 (07.03.95) (30) Priority Data: 9400111 7 March 1994 (07.03.94) DK (71)(72) Applicant and Inventor: JØRGENSEN, Mogens, Christian [DK/DK]; Tåsingevej 64, 4. th., DK-2100 København Ø (DK).		(81) Designated States: AM, AT, AT (Utility model), AU, BB, BG, BR, BY, CA, CH, CN, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), ES, FI, FI (Utility model), GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SK (Utility model), TJ, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <i>In English translation (filed in Danish).</i>
(54) Title: MAGNETIC CANDLE HOLDER (57) Abstract <p>The invention relates to a device for attaching a candle to a candle holder, comprising a magnet which is attached to the candle holder and a disk of magnetic material which is attached to the bottom end of the candle. The magnet can be permanently glued to the candle holder or attached with removable adhesive, and the magnetic disk can be attached to the candle by means of points which are embedded in the candle material.</p> <div data-bbox="966 1155 1429 2005" data-label="Image"> </div>		

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MAGNETIC CANDLE HOLDER

Technical field of the invention

The invention relates to a magnetic holder for attachment of candles to candlesticks, of existing or novel types, in which the attachment is difficult due to the size or shape of the candle holder.

Previously known solutions

The candle is pressed down into the candle holder.

The base of the candle is melted in order to fit into the candle holder.

Candle material is melted into the candle holder in order to "glue" the candle to the holder.

Aluminium sleeves for fitting between candle and holder.

Patent application No. DE 3 206 329, e.g. claim 3 and page 4, lines 9 - 12, discloses the attachment of a metal disc to a candle, in order to hold the candle by magnetic action. The claim is only valid for this single design.

The technical problem to be solved

The previously known methods of attachment are not stable.

The object of the invention is to provide a more stable and accessible attachment in the thousands of candlesticks of various designs where the stable and durable attachment of candles into candlesticks of previously known or novel designs is a global daily problem.

The magnetic candle holder is intended for detail merchandise as a set (magnet, spiked disc and adhesive), with which the customer can solve their candle attachment problems in a safe and invisible manner.

The new solution

The novel feature of the invention is a safe and stable attachment of candles of a diameter smaller than the candle holder, or to novel designs of candlesticks without a traditional holder (figure 3a).

Creative possibilities of decoration.

Attachment to other materials, e.g. stone, wood or in a bowl of water.

The technical effect

In the following, the invention and its use are explained referring to the drawings.

The magnetic candle holder consists of three separate parts:

A is a circular magnet with a flat top and a flat or rounded bottom, which is attached to the bottom of the candle holder.

B is a circular disc of magnetic material, in which three spikes, extending from the centre of the disc, are punched. The spiked disc is attached to the candle by pressing the spikes into the centre of the candle. The candle and the disc are then mounted onto the magnet.

With hard or brittle candle materials, a slight heating of the spikes can be necessary.

C is a measured amount of adhesive for attachment of the magnet.

The figures

Figure 1 shows a candle holder of previously known type, in which the diameter of the candle is smaller than the diameter of the candle holder, leading to attachment problems.

Figure 2 shows a candle holder of a previously known type, in which a magnet is attached (glued) to the bottom of the candle holder and a spiked disc is attached to the bottom of the candle.

Figure 3a shows the use of the invention on candles of small or large diameter in a candlestick of novel design.

Figure 3b shows the use of a cup-type candle in a candlestick of novel design. The cup of the candle is not made of magnetic material, but the wick holder in the bottom of the candle is. Therefore, the candle will be attracted by the magnet.

Figure 4 shows the spiked disc in plan, elevation and perspective views.

Figure 5 is intended to accompany the abstract.

Embodiments of the invention

Figure 1 shows the unstable attachment of candles in a candle holder of previously known type, in which the diameter of the candle holder is too large.

Figure 2 shows the use of the magnetic candle holder for solving the problem indicated in figure 1.

Figure 3a shows the use of the magnetic candle holder for attachment of candles of differing diameters in a candlestick of novel design.

Figure 3b shows the attachment of cup-type candles in a candlestick of novel design.

Figure 4 shows the spiked disc in plan, elevation and perspective views. The spiked disc can be produced by stamping or impression.

Claim

Magnetic holder for candles consisting of a magnet (A) attached to a candlestick of previously known or novel design, a spiked disc (B) of magnetic material attachable to the bottom of a candle and an adhesive (C) for attachment of the magnet.

The candle with the spiked disc is placed on top of the magnet, which holds the spiked disc, and thus also the candle, stably fixed.

The claim also covers a larger or smaller number of spikes on the spiked disc, or any screw function for attachment of a disc of magnetic material to the candle material.

Any mechanical attachment (object fixed in the candle material for attachment of a disc of magnetic material).

Any chemical attachment (gluing of the candle material to the disc of magnetic material).

Any mass production of candles involving the moulding of a disc of magnetic material into the candles.

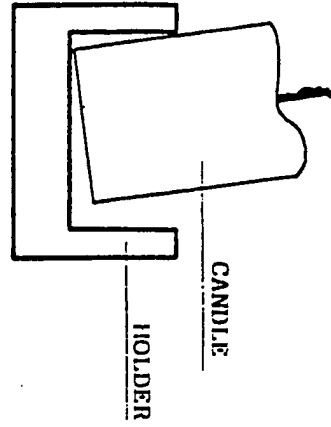


FIG. 1

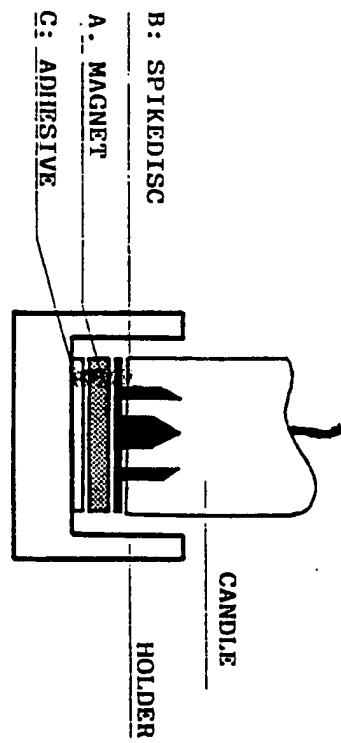


FIG. 2

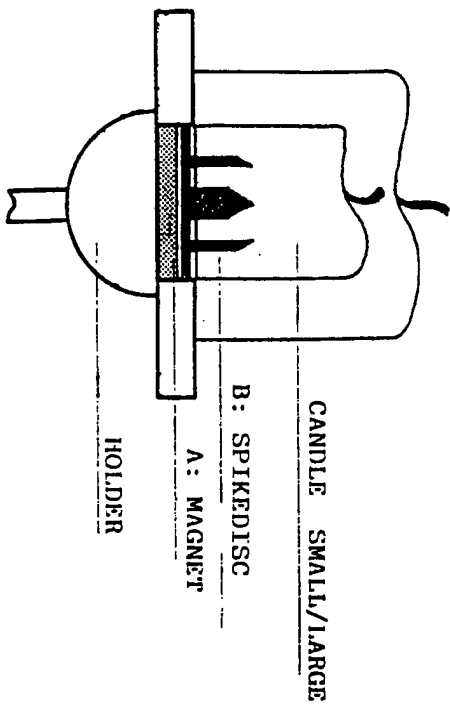


FIG. 3a

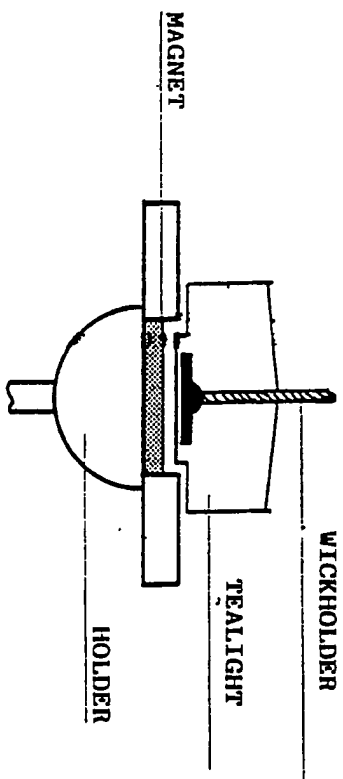
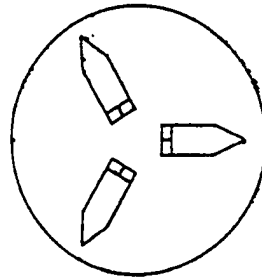
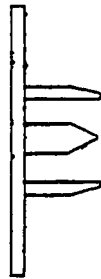


FIG. 3b

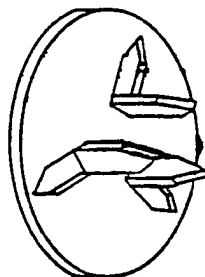
FIG. 4



PLAN.

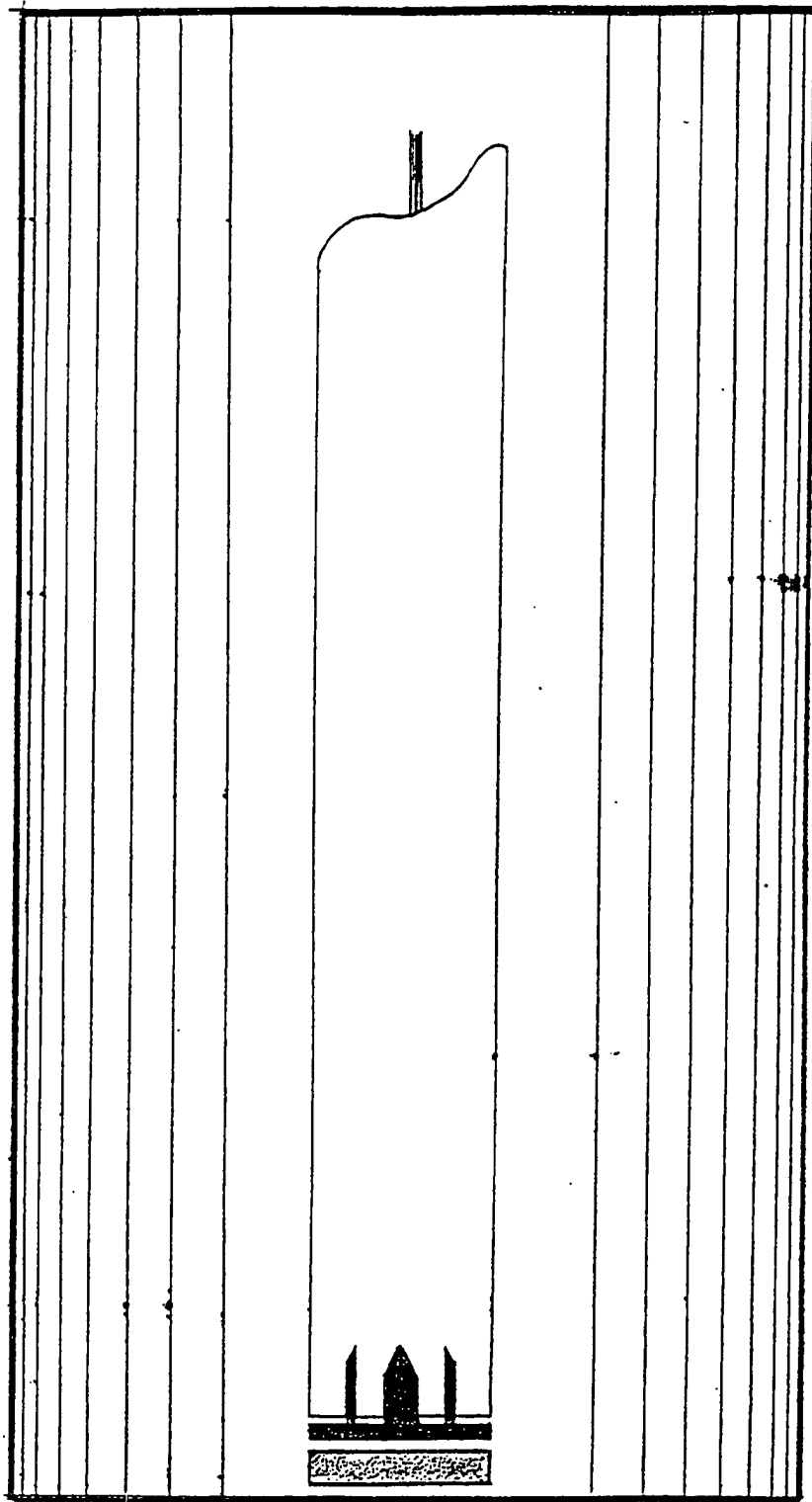


ELEVATION.



PERSPECTIVE.

3/3

FIG. 5.

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: F21V 35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: F21V

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 4037398 A1 (JÄNIG), 27 May 1992 (27.05.92), column 2, line 14 - line 25; column 2, line 64 - column 3, line 6, figures 2,7,8,12 --	1
X	DE 3206329 A1 (FORMA GLAS GMBH & CO. KG), 1 Sept 1983 (01.09.83), figure 1, claim 3 --	1
X	FR 1336107 A (MERCIER), 22 July 1963 (22.07.63), figures 1,2 --	1
A	DE 3132960 A1 (MURATA), 21 October 1982 (21.10.82) -- -----	1



Further documents are listed in the continuation of Box C.



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Date of the actual completion of the international search

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE-A1-	4037398	27/05/92	NONE	
DE-A1-	3206329	01/09/83	NONE	
FR-A-	1336107	22/07/63	NONE	
DE-A1-	3132960	21/10/82	NONE	